INTERNATIONAL SEARCH REPORT

International Application No

Express Mail: EV 630723247 US PCT/EP2004/053342 A. CLASSIFICATION OF SUBJECT MATTER
IPC 7 C07K14/28 C12M G01N33/53 A61K39/106 C12N15/31 According to International Patent Classification (IPC) or to both national classification and IPC B. FIELDS SEARCHED Minimum documentation searched (classification system followed by classification symbols) CO7K IPC 7 Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched Electronic data base consulted during the international search (name of data base and, where practical, search terms used) EPO-Internal, WPI Data, PAJ, BIOSIS, EMBASE, MEDLINE, Sequence Search C. DOCUMENTS CONSIDERED TO BE RELEVANT Citation of document, with indication, where appropriate, of the relevant passages Relevant to claim No. X DATABASE EMBL 'Online! 1-3,5-724 October 2002 (2002-10-24), "35D10LLI0004B Lawsonia library Lawsonia intracellularis genomic, DNA sequence." XP002327099 retrieved from EBI accession no. EM_PRO:BH795503 Database accession no. BH795503 Υ SEQ ID No: 1 has 100.00 % identity (100.00 4.8 - 16% ungapped) over 543 (q:s=314-856:1-543) with subject EM_GSS:BH795503 Υ EP 1 094 070 A (PFIZER PRODUCTS INC) 1-16 25 April 2001 (2001-04-25) see in particular pages 19-22, claims 19, 20. the whole document -/-χ Further documents are listed in the continuation of box C. Patent family members are listed in annex. Special categories of cited documents: *T* tater document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the "A" document defining the general state of the art which is not considered to be of particular relevance "E" earlier document but published on or after the international 'X' document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to filing date "L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another involve an inventive step when the document is taken alone document of particular relevance; the claimed invention citation or other special reason (as specified) cannot be considered to involve an inventive step when the document is combined with one or more other such docu-"O" document referring to an oral disclosure, use, exhibition or ments, such combination being obvious to a person skilled in the art. other means document published prior to the international filing date but "&" document member of the same patent family later than the priority date claimed Date of the actual completion of the international search Date of mailing of the international search report 01/06/2005 3 May 2005

Authorized officer

Rojo Romeo, E

Form PCT/ISA/210 (second sheet) (January 2004)

NL - 2280 HV Rijswijk

Fax: (+31-70) 340-3016

Name and mailing address of the ISA

2

European Patent Office, P.B. 5818 Patentlaan 2

Tel. (+31-70) 340-2040, Tx. 31 651 epo nl,

2 (0 1)	DOCUMENTS CONCIDENT TO BE DELEVANT	PCT/EP2004/053342		
Category *	ation) DOCUMENTS CONSIDERED TO BE RELEVANT Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.		
Υ	WO 00/69905 A (PIG RESEARCH AND DEVELOPMENT CORPORATION; AGRICULTURE VICTORIA SERVICE) 23 November 2000 (2000-11-23) see in particular the claims and the examples. the whole document	1-16		
Υ	US 5 885 823 A (KNITTEL ET AL) 23 March 1999 (1999-03-23) see in particular the claims and the examples the whole document	1-16		
P,X	WO 2004/033631 A (REGENTS OF THE UNIVERSITY OF MINNESOTA; KAPUR, VIVEK; GEBHART, CONNIE,) 22 April 2004 (2004-04-22) SEQ ID No: 1 has 100.00 % identity (100.00 % ungapped) over 543 (q:s=314-856:1-543) with SEQ ID No: 47; SEQ ID No: 2 has 100.00 % identity (100.00 % ungapped) over 163 with SEQ ID No: 109 Claim 30	1-16		

2

ø

INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No
PCT/EP2004/053342

Patent document cited in search report		Publication date		Patent family member(s)		Publication date
EP 1094070	A	25-04-2001	EP	1094070	A2	25-04-2001
			JP	2001169787	Α	26-06-2001
			JP	2004229667	Α	19-08-2004
			US	2003021802	A1	30-01-2003
			US	2003202983		30-10-2003
			US	6605696		12-08-2003
WO 0069905	Α	23-11-2000	WO	0069905	A1	23-11-2000
			AU	767390	B2	06-11-2003
			ΑU	4386000	Α	05-12-2000
			ΑU	2004200487	A1	04-03-2004
			BR	0011290		21-05-2002
			CA	2372102		23-11-2000
			ΕP	1183268		06-03-2002
			JP	2003521881		22-07-2003
			MX	PA01011570		20-08-2003
			NZ	515330		29-04-2003
us 5885823	 А	23-03-1999	US	5714375	A	03-02-1998
			AT	289069		15-02-2005
			AU	717045		16-03-2000
			ΑU	6262796		24-12-1996
			BG	64292		31-08-2004
			BG	102130	Α	30-09-1998
			BR	9608338	Α	05-01-1999
			CA	2222643	A1	12-12-1996
			CN	1167146	Α	10-12-1997
			CN	1519311		11-08-2004
			CZ	9703899		15-07-1998
			DE	69634334	D1	17-03-2005
			DE	843818		28-11-2002
			EP	1403643		31-03-2004
			EP	0843818		27-05-1998
			ES	2173055	T1	16-10-2002
			HU	9900884		28-07-1999
			ID	17131		04-12-1997
			JР	11507225		29-06-1999
			NZ	319994		28-01-2000
			PL	325872		17-08-1998
			PL	187849		29-10-2004
•			PL	187850		29-10-2004
			RO	118885		30-12-2003
			WO	9639629		12-12-1996
WO 2004033631		22-04-2004	AU	2003295341		04-05-2004
			WO	2004033631	A 2	22-04-2004